

DRAFT

APPENDIX IV

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)				
	0202*	0203	0204*	0205	0301
Bare Rock/Sand/Clay		66		44	59
Deciduous Forest		8,086		6,250	14,192
Developed Open Space		755		521	1,491
Evergreen Forest		511		125	411
Grassland/Herbaceous		5,052		4,049	6,981
Low Intensity Development		246		175	389
Medium Intensity Development		11		11	9
Mixed Forest		1,485		283	1,571
Open Water		149			287
Pasture/Hay		3,722		3,324	3,646
Row Crops		3		2	8
Shrub/Scrub		13		2	58
Woody Wetlands		23		5	22
Total		20,122		14,790	29,126

Table A4-1a.

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)				
	0302	0303	0304	0305	0306
Bare Rock/Sand/Clay	298	16	163	19	58
Deciduous Forest	3,083	2,157	15,665	11,516	23,112
Developed Open Space	809	538	2,055	970	1,893
Emergent Herbaceous Wetlands				1	2
Evergreen Forest	304	152	404	130	448
Grassland/Herbaceous	2,774	1,935	7,187	3,649	3,983
High Intensity Development	110	4	100		2
Low Intensity Development	664	331	1,169	224	346
Medium Intensity Development	272	18	484	4	11
Mixed Forest	1,032	530	1,554	698	1,462
Open Water	2		286	331	3,265
Pasture/Hay	2,219	1,259	6,595	2,381	2,641
Row Crops	1	1	108	1	15
Shrub/Scrub			45	3	111
Woody Wetlands	4	2	32	24	96
Total	11,571	6,944	35,849	19,952	37,445

Table A4-1b.

DRAFT

LAND USE/LAND COVER	AREAS IN HUC-12 SUBWATERSHEDS (ACRES)	
	0307	0308
Bare Rock/Sand/Clay	179	201
Deciduous Forest	16,902	16,337
Developed Open Space	1,796	2,453
Emergent Herbaceous Wetlands	2	7
Evergreen Forest	501	566
Grassland/Herbaceous	6,204	4,256
High Intensity Development	10	5
Low Intensity Development	1,268	940
Medium Intensity Development	264	103
Mixed Forest	1,617	1,828
Open Water	813	4,956
Pasture/Hay	11,104	2,956
Row Crops	33	64
Shrub/Scrub	12	158
Woody Wetlands	103	61
Total	40,808	34,893

Table A4-1c.

Table A4-1a-c. Land Use Distribution in the Powell River Watershed by HUC-12. Data are from 1992 Multi-Resolution Land Characterization (MRLC) derived by applying a generalized Anderson Level II system to mosaics of Landsat thematic mapper images collected every five years. *, Data not Available.

DRAFT

HYDROLOGIC SOIL GROUPS
GROUP A SOILS have low runoff potential and high infiltration rates even when wet. They consist chiefly of sand and gravel and are well to excessively drained.
GROUP B SOILS have moderate infiltration rates when wet and consist chiefly of soils that are moderately deep to deep, moderately to well drained, and moderately coarse to coarse textures.
GROUP C SOILS have low infiltration rates when wet and consist chiefly of soils having a layer that impedes downward movement of water with moderately fine to fine texture.
GROUP D SOILS have high runoff potential, very low infiltration rates, and consist chiefly of clay soils.

***Table A4-2. Hydrologic Soil Groups in Tennessee as Described in WCS.** Soils are grouped into four hydrologic soil groups that describe a soil's permeability and, therefore, its susceptibility to runoff.*

DRAFT

STATION	HUC-10	AGENCY	NAME	AREA (SQ MILES)	LOW FLOW (CFS)		
					1Q10	7Q10	3Q20
03531700	0601020602	USGS	Mulberry Creek				
03532000	0601020603	USGS	Powell River	49.51			

Table A4-3. Historical Streamflow Data Summary Based on Mean Daily Flows in the Powell River Watershed. USGS, United States Geological Survey; TVA, Tennessee Valley Authority.

Additional information may be found at:

<http://nwis.waterdata.usgs.gov/tn/nwis/discharge>

DRAFT

AGENCY	STATION	LOCATION	HUC-12
11NPSWRD	CUGA_NURE_10	Tnhn529r	060102060203
11NPSWRD	CUGA_NURE_10	Tnhn529r	060102060203
11NPSWRD	CUGA_NURE_11	Tnhn546r	060102060203
TDECWPC	ECO67F14	Powell River@ RM 106.8	060102060203
TDECWPC	FOURM000.1HK	Fourmile Creek @ RM 0.1	060102060203
TDECWPC	MULBE000.3HK	Mulberry Creek @ RM 0.3	060102060203
TDECWPC	POWEL103.3HK	Powell River @ RM 103.3	060102060203
TDECWPC	POWEL115.7HK	Powell River @ RM 115.7	060102060203
TDECWPC	SUTTO000.1HK	Sutton Branch @ RM 0.1	060102060203
TDECWPC	ECO67F23	Martin Creek @ RM 0.5	060102060204
TDECWPC	MULBE000.7HK	Mulberry Creek @ RM 0.7	060102060205
11NPSWRD	CUGA_NURE_05	Tncl522r	060102060301
11NPSWRD	CUGA_NURE_09	Tncl566r	060102060301
TDECWPC	ECO67F25	Powell River @ RM 65.5	060102060301
TDECWPC	LITTL000.1CL	Little Creek @ RM 0.1	060102060301
TDECWPC	MURPH000.1CL	Murphy Branch @ RM 0.1	060102060302
TDECWPC	RUSSE000.5CL	Russell Creek @ RM 0.5	060102060302
TDECWPC	RUSSE003.0CL	Russell Creek @ RM 3.0	060102060302
TDECWPC	RUSSE006.0CL	Russell Creek @ RM 6.0	060102060302
11NPSWRD	CUGA_NURE_08	Tncl565r	060102060303
TDECWPC	INDIA000.1CL	Indian Creek @ RM 0.1	060102060303
TDECWPC	INDIA003.5CL	Indian Creek @ RM 3.5	060102060303
TDECWPC	STATI000.1CL	Station Creek @ RM 0.1	060102060303
TDECWPC	BLAIR000.8CL	Blairs Creek @ RM 0.8	060102060304
TDECWPC	BLAIR1T0.1CL	UT to Blairs Creek @ RM 0.1	060102060304
11NPSWRD	CUGA_CMRC_GC10	Gap Creek - 0.25 Miles South Of Tiprell	060102060304
11NPSWRD	CUGA_CMRC_GC5	Gap Creek - 0.25 Miles South Of Iron Furnace	060102060304
11NPSWRD	CUGA_CPSU_BP1	Drainage Ditch; Cumberland Drive	060102060304
11NPSWRD	CUGA_CPSU_CAVE	Cavern At Construction Site	060102060304
11NPSWRD	CUGA_CPSU_GC3	Gap Creek: Within Town Of Cumberland Gap	060102060304
11NPSWRD	CUGA_CPSU_GC4	UT to Gap Creek (Us 58)	060102060304
11NPSWRD	CUGA_CPSU_GC5	Gap Creek: South Of Tributary	060102060304
11NPSWRD	CUGA_CPSU_GC7	Gap Creek:0.3 Miles Upstream From Park Boundary	060102060304
11NPSWRD	CUGA_CPSU_STOR1	Drainage Ditch: South Of 25e And US 58	060102060304
11NPSWRD	CUGA_CPSU_TD1	Gap Creek Tributary Within Town Of Cuga	060102060304
11NPSWRD	CUGA_CPSU_TNN	Tunnel - Tennessee Side	060102060304
11NPSWRD	CUGA_NURE_04	Tncl501r	060102060304
11NPSWRD	CUGA_NURE_06	Tncl536r	060102060304
11NPSWRD	CUGA_NURE_07	Tncl563r	060102060304
TDECWPC	GAP004.3CL	Gap Creek @ RM 4.3	060102060304
TDECWPC	POWEL065.3CL	Powell River @ RM 65.3	060102060304

Table A4-4a.

DRAFT

AGENCY	STATION	LOCATION	HUC-12
TDECWPC	POWEL067.8CL	Powell River @ RM 67.8	060102060304
TDECWPC	CAWOO000.2CL	Cawood Branch @ RM 0.2	060102060307
TDECWPC	DAVIS011.6CL	Davis Creek @ RM 11.6	060102060307
TDECWPC	DAVIS014.6CL	Davis Creek @ RM 14.6	060102060307
TDECWPC	DAVIS016.2CL	Davis Creek @ RM 16.2	060102060307
TDECWPC	DAVIS018.0CL	Davis Creek @ RM 18.0	060102060307
TDECWPC	DAVIS020.5CL	Davis Creek @ RM 20.5	060102060307
TDECWPC	DAVIS022.6CL	Davis Creek @ RM 22.6	060102060307
TDECWPC	DAVIS024.1CL	Davis Creek @ RM 24.1	060102060307
TDECWPC	DOSSE001.7CA	Dossett Creek @ RM 1.7	060102060307
TDECWPC	RUSSE000.3CL	Russell Branch @ RM 0.3	060102060307
11NPSWRD	CUGA_CMRC_GC1	Gap Creek At Iron Furnace	Virginia
11NPSWRD	CUGA_CMRC_SC10	Station Creek At US 58	Virginia
11NPSWRD	CUGA_CMRC_SC5	Station Creek - 0.25 Miles North Of US 58	Virginia
11NPSWRD	CUGA_CPSU_CUDJO	Cudjo Cave	Virginia
11NPSWRD	CUGA_CPSU_IF	Iron Furnace	Virginia
11NPSWRD	CUGA_CPSU_LH10	Lewis Hollow Drainage At Highway 58	Virginia
11NPSWRD	CUGA_CPSU_LH5	Lewis Hollow Upstream From US 58	Virginia
11NPSWRD	CUGA_CPSU_SH10	Shillalah Creek: At Park Boundary	Virginia
11NPSWRD	CUGA_CPSU_ST10	Station Creek At Intersection With US 58	Virginia
11NPSWRD	CUGA_CPSU_ST5	Station Creek: North Of US 58	Virginia
11NPSWRD	CUGA_NURE_12	Vale534r	Virginia
11NPSWRD	CUGA_NURE_13	Vale535r	Virginia
11NPSWRD	CUGA_NURE_14	Vale537r	Virginia
11NPSWRD	CUGA_NURE_15	Vale538r	Virginia

Table A4-4b.

Table A4-4a-b. STORET Water Quality Monitoring Stations in the Powell River Watershed.
NPSWRD, National Park Service Water Resources Division; TDECWPC, Tennessee Department of Environment and Conservation Division of Water Pollution Control; UT, Unnamed Tributary.

FACILITY NUMBER	FACILITY NAME	SIC	SIC NAME	MADI	WATERBODY	HUC-12
TN0024791	Claiborne County Utility District	4952	Sewerage System	Minor	Russell Creek @ RM 6.0	060102060302
TN0023256	Lincoln Memorial University	4952	Sewerage System	Minor	Sinkhole to Powell River	060102060304
TN0060747	Cumberland Gap STP	4952	Sewerage System	Minor	Gap Creek @ RM 8.7	060102060304
TN0059978	Powell Valley Elementary School	4952	Sewerage System	Minor	Sink Hole	060102060307

Table A4-5. NPDES Permittees in the Powell River Watershed. SIC, Standard Industrial Classification; MADI, Major Discharge Indicator.

DRAFT

FACILITY NUMBER	PERMITEE	COUNTY	LIVESTOCK	WATERBODY	HUC-12
TNA000006	Hickory Corner Dairy	Claiborne	Dairy	Davis Creek	060102060304
TNA000007	Jennings Poultry	Claiborne	Poultry	Coonsies Creek	060102060304

Table A4-6. CAFO Sites in the Tennessee Portion of the Powell River Watershed.

FACILITY NUMBER	PERMITEE	SIC	SIC NAME	WATERBODY	HUC-12
TN0003069	Vulcan Construction Materials (Tazewell Quarry)	1422	Crushed and Broken Limestone	Russell Creek	060102060302
TN0066648	Raja Stone Company, Inc. (Tazewell Quarry)	1422	Crushed and Broken Limestone	UT to Russell Creek	060102060302
TN0079201	Hi-View Mining (Claiborne County Quarry #1)	1422	Crushed and Broken Limestone	UT to Russell Creek	060102060302
TN0052485	Appolo Fuels, Incorporated (Area #5)	1221	Bituminous Coal Underground Mining	Langley Branch	060102060303
TN0072613	Elmo Greer and Sons, Inc. (Goins Hollow Quarry)	1422	Crushed and Broken Limestone	UT to Blair Creek	060201020604

Table A4-7. Active Permitted Mining Sites in the Powell River Watershed. SIC, Standard Industrial Classification; UT, Unnamed Tributary.

LOG NUMBER	COUNTY	DESCRIPTION	WATERBODY	HUC-12
NRS03.271	Claiborne	Bridge Repair	Powell River	060102060304

Table A4-8. Individual ARAP Permits Issued January 2000 Through June 2004 in the Powell River Watershed.

FACILITY NUMBER	FACILITY NAME	SECTOR	RECEIVING STREAM	AREA*	HUC-12
TNR050144	Brooks Furniture Manufacturing	W	Russell Creek @ RM 7.02, @ RM 6.97, and @ RM 6.95	2.6	060102060302
TNR053150	England Plant 7	W	Ball Creek	14	060102060302
TNR053392	Tazewell Oil, Incorporated	P	Russell Creek	0.5	060102060302
TNR053964	B and F Hot Mix Asphalt, Inc.	D	Eagle Hollow Creek	1.8	060102060302
TNR056393	DTR Tennessee, Inc. Plant 2	Y	UT to Russell Creek	16	060102060302
TNR051643	J and S Auto Salvage	M	WWC to Station Creek	6.5	060102060303
TNR055062	Volunteer Auto Parts	M	WWC to Indian Creek	42.9	060102060303
TNR053928	Forest Products, Incorporated	A	Old County Rock Quarry	53.77	060102060304
TNR053785	New Tazewell Woodyard	A		0.5	060102060306
TNR053607	Lakeside Wood Products, Inc.	A	Dry Branch	1.3	060102060307
TNR054364	Hopper Lumber and Sawmill	A	Davis Creek or Owen Branch	2.5	060102060307
TNR050290	Valley Auto Parts	M	Chambers Creek, Cedar Creek, and Norris Creek	11	060102060308
TNR054422	Bushtec Manufacturing	AB	Metro Storm Sewer	4.5	060102060308

Table A4-9. Active Permitted TMSP Facilities in the Powell River Watershed. Area, acres of property associated with industrial activity; UT, Unnamed Tributary; WWC, Wet Weather Conveyance. Sector details may be found in Table A4-11.

DRAFT

SECTOR	TMSP SECTOR NAME
A	Timber Products Facilities
AA	Facilities That Manufacture Metal Products including Jewelry, Silverware and Plated Ware
AB	Facilities That Manufacture Transportation Equipment, Industrial or Commercial Machinery
AC	Facilities That Manufacture Electronic and Electrical Equipment and Components, Photographic and Optical Goods
AD	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Required)
AE	Facilities That Are Not Covered Under Sectors A Thru AC (Monitoring Not Required)
B	Paper and Allied Products Manufacturing Facilities
C	Chemical and Allied Products Manufacturing Facilities
D	Asphalt Paving, Roofing Materials, and Lubricant Manufacturing Facilities
E	Glass, Clay, Cement, Concrete, and Gypsum Product Manufacturing Facilities
F	Primary Metals Facilities
G	Metal Mines (Ore Mining and Dressing) (RESERVED)
H	Inactive Coal Mines and Inactive Coal Mining-Related Facilities
I	Oil or Gas Extraction Facilities
J	Construction Sand and Gravel Mining and Processing and Dimension Stone Mining and Quarrying Facilities
K	Hazardous Waste Treatment Storage or Disposal Facilities
L	Landfills and Land Application Sites
M	Automobile Salvage Yards
N	Scrap Recycling and Waste and Recycling Facilities
O	Steam Electric Power Generating Facilities
P	Vehicle Maintenance or Equipment Cleaning areas at Motor Freight Transportation Facilities, Passenger Transportation Facilities, Petroleum Bulk Oil Stations and Terminals, the United States Postal Service, or Railroad Transportation Facilities
Q	Vehicle Maintenance Areas and Equipment Cleaning Areas of Water Transportation Facilities
R	Ship or Boat Building and Repair Yards
S	Vehicle Maintenance Areas, Equipment Cleaning Areas or From Airport Deicing Operations located at Air Transportation Facilities
T	Wastewater Treatment Works
U	Food and Kindred Products Facilities
V	Textile Mills, Apparel and other Fabric Product Manufacturing Facilities
W	Furniture and Fixture Manufacturing Facilities
X	Printing and Platemaking Facilities
Y	Rubber and Miscellaneous Plastic Product Manufacturing Facilities
Z	Leather Tanning and Finishing Facilities

Table A4-10. TMSP Sectors and Descriptions.